force, 10, from SE.; shifts of wind, SE. to S. There was a lull in the gale from midnight of the 14th to noon of the 15th.

The U. S. A. T. Dix, Capt. A. N. Rasmussen, Miike (Feb. 9) for San Francisco, was another vessel involved. The report from the Dix shows that very rough to mountainous seas were encountered throughout most of the voyage, with a strong WNW. and NW. swell which prevailed even while the wind and sea were from the south.

The American S. S. Edmore, Capt. T. H. Cann, Yokohama (Feb. 13) for Seattle, also had heavy weather on The Edmore, some distance to the westward of the Dix, had a very persistent NE. swell.

One of the vessels on the westward passage about this time was British S. S. Empress of Asia, Capt. A. T. Hailey, Victoria (Feb. 11) for Yokohama. This vessel met the principal depression of the series referred to on the 18th, when in about longitude 165° E. Mr. E. Turney, fourth officer and observer, has furnished a special report which shows that during the afternoon of the 18th and morning of the 19th the barometer fell from 29.60 inches to 28.50 inches. About noon of the 19th the barometer began to rise rapidly and the wind, which

was then blowing a moderate gale from the north, went to NNW. and increased to a whole gale, which continued to midnight. The rise of the barometer from noon of the 19th to noon of the 20th amounted to 1.35 inches.

One of the most interesting reports for the month is that from the well-known American yacht Carnegie, returning to home waters after an extended cruise in the Southern Hemisphere. The Carnegie, under the command of Capt. J. P. Ault, sailed from Fanning Island for San Francisco on January 15, arriving February 19. Until the end of January the weather was good, with mostly light to fresh easterly breezes and smooth to moderate seas. From February 1 to 15, however, the weather was generally stormy, with rough to heavy seas. The highest force of the wind was 9, on the 12th-13th. Mr. Russell Pemberton, meteorological observer, invites special attention to the fact that from midnight of the 1st to 2 a. m. of the 11th, while on a course from latitude 38° 31′ N., longitude 165° 07′ W. to latitude 38° 30′ N., longitude 136° 34′ W., the wind was continuously between the points SW. and SE., force 4 to 8. The weather was overcast, foggy, and rainy during almost the entire period.

## NOTES ON WEATHER IN OTHER PARTS OF THE WORLD.

Newfoundland .- St. Johns, February 8.- Newfoundland to-night huddled under its heaviest snow blanket in 30 years with a blizzard of three days still raging unabated. Rail, water, and highway traffic has been suspended throughout the colony and pedestrians here to-day

were compelled to use snowshoes to venture into the streets.—Associated Press (?) February 8, 1921.

Jamaica.—Rain began to fall in Jamaica during the first week of February, after months of drought, during which some of the banana and cane growing districts

suffered considerably.1

Europe.—The pressure distribution over west and northwest Europe during the month was largely dominated by a series of important anticyclones. In consequence, strong winds and gales were rare, and the rainfall was small except in the Mediterranean area. Temperature was mostly high for the time of year in western Europe and Iceland, but severe frost prevailed at times over Sweden. Depressions followed paths well to the northward or southward of the British Isles.

Ireland, 51.1

and New South Wales during the early and middle parts of the month, but in Western Australia the fall was too light to be of benefit. Near the end of the month heavy rainstorms were occurring in South and Central Australia,

British Isles.—The most noteworthy feature of the

month was pronounced deficiency of rainfall such as had

not been observed since the very dry Februaries of 1895 and 1891. \* \* \* At Seawaithe the rainfall was the

smallest noted in February since observations began in

1845, January of this year having been the wettest since 1873. The general rainfall expressed as a percentage of the average was: England and Wales, 15; Scotland, 39;

Australia.—Partial but useful rains fell in Queensland

and also over a considerable portion of New South Wales. New Zealand.—Wellington, Feb. 25.—A hurricane southeast of the Lau (Fiji) Group on February 12, caused a tidal wave four feet high, which swept over the islands. The cocoanut trees are not seriously damaged. Two cutters were wrecked but no loss of life is reported.— Samoa Times, Mar. 5, 1921,

<sup>&</sup>lt;sup>2</sup> Cf. Pickering, W. H.: Relation of prolonged tropical droughts to sunspots, Mo. WEATHER REV., October, 1920, 48, 589-592. 41734-21---

<sup>&</sup>lt;sup>1</sup> The Meteorological Magazine, March, 1921, pp. 50 and 56.